

KINKS for the Auto Handyman

Disappearing Luggage Carrier, Dent Remover, Other Ideas

WHILE a wheel puller is the proper tool with which to remove a rear wheel that is tightly jammed on the tapered end of the axle, sometimes you find you must do the job without the necessary special tool. Fig. 1 shows a way to get the wheel off by means of a tire chain and the jack. After the hub cap and locking nut have been removed, the tire chain is looped around a couple of spokes and the end of the jack is placed with the foot against the axle and the elevating step in the loop, so that working the jack lever exerts pressure directly in line with the axle. Make sure that the chain is fastened securely.

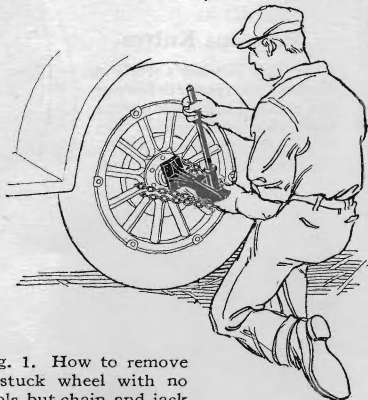


Fig. 1. How to remove a stuck wheel with no tools but chain and jack

Pole Holder for Car Fender

ABOUT the most awkward object to carry in an auto is a long pole. It won't fit inside the body, of course, and when strapped on the side scrapes off the paint. A solution of this problem is to make a pair of brackets as shown in Fig. 3 and clamp them to the fenders. A single bolt will hold each bracket in place, and if felt is glued to the part of the bracket that comes in contact with the fender, there will be no scratching. The brackets can be made of steel of any dimensions, depending on the strength required.

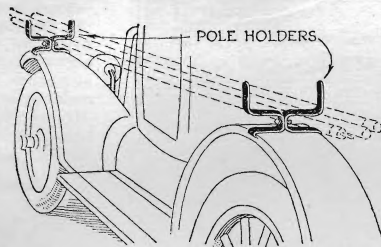


Fig. 3. These special fender pole holders will permit you to carry long poles on your car without scratching the paint

Simple Dent Remover

IT IS possible by the skilful use of a hammer to remove dents in a rim of the type used for straight side tires, but the work is simplified by the use of the tool shown in Fig. 7. A piece of an old spring is first heated to draw the temper, and after a slot has been filed in it it should be retempered. After hardening, draw the temper to a deep straw color.

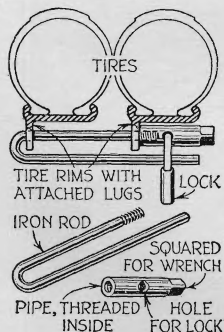


Fig. 6. Two bolts like this, one without the lock, will permit carrying an extra spare tire

To Outwit the Gasoline Thief

THE tourist and auto camper often finds his gas tank mysteriously empty after a night spent in a strange camp or if the car has been stored in a strange garage. Petty thievery of this kind can be stopped by fitting a lock to your gas tank filler cap as shown in Fig. 2. The hasp and hinge are cut out of heavy sheet iron. The staple is obtainable in a hardware store. Bend the end of the hinge so that

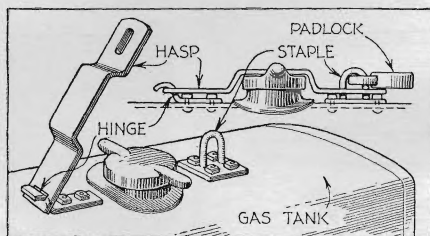


Fig. 2. Locking your gasoline filler cap in this way will prevent those mysterious losses of gasoline that sometimes occur on motor tours

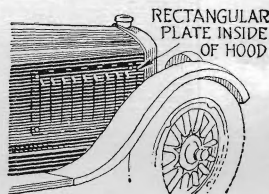


Fig. 4. Metal or plywood plates fastened to the inside of your hood as shown will help keep the motor warm when the car is left standing

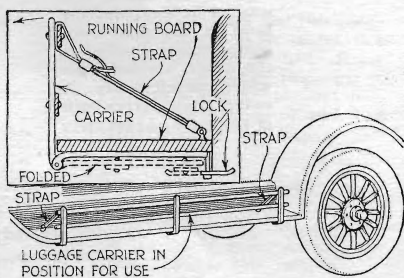


Fig. 5. A folding running-board luggage carrier like this is always handy when you need it, and yet it is out of the way when not in use

Ten Dollars for an Idea!

GEORGE D. HUGO, of Seattle, Wash., wins the \$10 prize this month for his suggestion of the disappearing luggage carrier (Fig. 5). Each month POPULAR SCIENCE MONTHLY awards \$10 in addition to regular space rates to the reader sending in the best idea for motorists. Other published contributions will be paid for at usual rates.

the hasp will clear the nuts. Use long bolts and push them through the holes from the inside of the tank so that you can grasp the ends of the bolts with the pliers while you tighten the nuts. The ends of the bolts can then be cut off and hammered over so that there will be no chance of their loosening up. Use gaskets cut from vellumoid under the bolt heads.

How to Carry an Extra Spare

IF YOUR rims are made with the lugs welded onto them, you can carry an extra spare tire and lock it so it cannot be stolen, by making two bolts as shown in Fig. 6. Only one need be drilled for a padlock, however.

The iron rod should be as large as will pass through the holes in the lugs; and a piece of pipe, threaded, filed and drilled as shown, completes the job. As the bolts hold the extra tire tightly against the one that you regularly carry, there is little chance for chafing unless you are going on a long trip. In that case it would be worth while to slip a short piece of pipe over the bolt that is cut to act as a spacer, so as to hold the tires apart.

Keeps Motor Warm

ARADIATOR cover of the conventional type serves to regulate the amount of air that flows through the radiator while the car is in motion, but it cannot keep the motor warm for very long when the car is standing, owing to loss of heat through the openings in the side of the hood which permit the air to circulate freely. Metal or plywood plates bolted on the inside of the hood as shown in Fig. 4 will stop this waste and also help to keep your feet warm by driving the heated air back through the openings in the floor boards.

Luggage Carrier Folds Out of Way

THIS novel homemade luggage carrier (Fig. 5) is made so that it folds underneath the running board when not in use. Three large sized strap hinges are bent as shown, and screwed to the under side of the running board. Wooden or light metal strips are fastened to the movable member of the hinges with short bolts. A leather strap at each end will serve to hold the carrier in the proper position when in use, and a special catch will hold it flat against the bottom of the running board when not wanted.

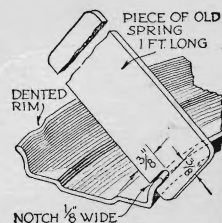


Fig. 7. Dents in your tire rim may be removed with surprising ease with this ingenious tool